



## State of Nevada – Department Of Personnel

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### CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
<b>WATER SYSTEM MANAGER</b>	<b>34</b>	<b>G</b>	<b>9.475</b>
<b>WATER SYSTEM OPERATOR II</b>	<b>31</b>	<b>G</b>	<b>9.498</b>
<b>WATER SYSTEM OPERATOR I</b>	<b>29</b>	<b>G</b>	<b>9.478</b>
<b>WATER SYSTEM WORKER</b>	<b>27</b>	<b>G</b>	<b>9.499</b>

### SERIES CONCEPT

Water System Operators perform technical duties related to testing and treatment of ground and surface water, the operational duties associated with the collection and storage of ground and surface water, and the treatment and distribution of water.

Operate and maintain water treatment and distribution equipment; monitor compliance with State health regulations and Environmental Protection Agency regulations and implement corrective water treatment procedures; analyze treated water samples for turbidity, pH level, TPH, and chlorine residual tests; monitor contaminate levels to ensure compliance with regulatory requirements; adjust chemical dosages on analysis; collect water samples on a periodic basis and forward samples to the State Health Laboratory as required.

Route stream water into reservoir feed lines by installing and maintaining a catchment system including aprons, culverts, sand traps and transmission pipes.

Control reservoir levels and water distribution by releasing or retaining water through manual or computer systems; install and maintain the water-pumping system as needed to replenish water levels.

Perform preventive maintenance and repairs on the water system by inspecting distribution systems and maintaining pumps, valves, motors, air lines, and related machinery; rebuild motors, pumps and pipelines as necessary; clear debris; flush sand traps; repair pressure relief boxes, valves and pumps using a variety of hand and power tools, welders, dump trucks, loader and backhoe; maintain access roads within the water system by grading road surface and using a snow plow; transport vehicles and equipment on public roads and highways.

Assist supervisor in overseeing the management, collection, treatment and distribution of water resources; gather information including reservoir levels, water released and diverted, snow depth information, and system activities; develop reports, cost estimates and projections related to water collection, treatment and distribution.

May provide supervision to lower level operators and workers, seasonal staff and the work of inmates.

Perform related duties as assigned.

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Page 2 of 6

## CLASS CONCEPTS

**Water System Manager:** Under general direction, in addition to performing the duties described in the series concept, the incumbent oversees the management and collection of the State's water resources distributed to Carson City and Storey counties and the treatment and distribution of water to the Stewart building complex. The incumbent is certified as a Water Treatment Operator, grade 1 and a Water Distribution Operator, grade 2.

The incumbent participates with Carson City and Storey counties, the Carson Water Subconservancy District, special interest groups, and legislative committees in developing water policies, long range water needs assessments, water budgeting and distribution plans, and conservation and education plans and initiatives; oversees the development and maintenance of the collection (lake and run-off) system, maintenance or replacement of pipelines and equipment, and operation of the Stewart well and treatment and distribution system.

This position also develops and oversees a dedicated budget including projecting revenues and expenditures; monitors expenditures during the fiscal year; ensures the proper payment for water distributed to Carson City and Storey counties; assists the Division Administrator in the development of water supply contracts; supervises operators, workers, and seasonal employees, and directs the work of inmates.

**Water System Operator II:** Under general supervision, incumbents perform all of the duties described in the series concept, and serve as a first-line supervisor including establishing work performance standards, assigning and reviewing work, providing work direction, evaluating performance, and providing counseling and discipline to subordinate staff. Incumbents function at the journey level and are certified as a Water Treatment Operator, grade 1 and Water Distribution Operator, grade 2.

**Water System Operator I:** Under general supervision, incumbents perform most of the duties described in the series concept and may direct the work of seasonal employees and inmates. Incumbents function as an entry-level operator and are certified as Water Treatment Operator, grade 1. Operators at this level must become certified as a Water Distribution Operator, grade 1 within 12 months of appointment.

Depending on the needs of the agency, incumbents may be permanently assigned to this level and function below the journey level, or progress to the higher level upon successful completion of the training period, attainment of the required certification, license endorsement, and with the recommendation of the appointing authority.

**Water System Worker:** Under close supervision, incumbents participate in a training program consisting of a course of self study and on-the-job training to acquire the necessary skills and experience required to perform the duties described in the series concept and become certified as a Water Treatment Operator, grade 1. Incumbents progress to the higher level upon successful completion of the training period, attainment of the required certification, license endorsement, and with the recommendation of the appointing authority.

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Page 3 of 6

## **MINIMUM QUALIFICATIONS**

### **SPECIAL NOTES AND REQUIREMENTS:**

- \* Positions require a Nevada commercial driver's license - class "A" by the time of appointment and as a condition of continuing employment.
- \* Water System Workers must obtain a commercial driver's license hazardous materials and tankers endorsement within 6 months of appointment and Water Treatment Operator, grade 1 certification within 18 months of appointment. License endorsement and certification must be issued by the State of Nevada and are required as a condition of continuing employment.
- \* Water System Operator I incumbents must obtain a commercial driver's license with hazardous materials and tankers endorsement and Water Treatment Operator, grade 1 certification by the time of appointment; and Water Distribution Operator, grade 1 certification within 12 months of appointment. License endorsement and certifications must be issued by the State of Nevada and are required as a condition of continuing employment.
- \* The Water System Manager and Water System Operator II incumbents must obtain a commercial driver's license hazardous materials and tankers endorsement; Water Treatment Operator, grade 1 certification; and Water Distribution Operator, grade 2 certification by the time of appointment. License endorsement and certifications must be issued by the State of Nevada and are required as a condition of continuing employment.
- \* Duties are performed outdoors and in inclement weather. Additionally, duties frequently include walking to elevations over 6000 feet and require the use of snowmobiles and snow shoes to inspect and maintain the water system and equipment.
- \* Incumbents must be available to work weekends and are subject to call-out twenty-fours hour, 7 days a week.
- \* Vocational education may consist of course work and practical experience in areas such as metal shop, wood shop, small engines repair, agricultural mechanics, or other related courses which provide experience working with hand tools and performing mathematic computations.

### **WATER SYSTEM MANAGER**

**EDUCATION AND EXPERIENCE:** Graduation from high school or equivalent education and three years of experience in the operation and maintenance activities of a water treatment or water distribution system, one year of which included supervising lower level water treatment or distribution operators; **OR** an equivalent combination of education and experience. (*See Special Notes and Requirements*)

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES** (required at time of application):

**Detailed knowledge of:** principles and techniques of operating and maintaining a reservoir water system including reservoir management and intake structures, coagulation and flocculation, sedimentation, filtration, disinfections, corrosion control, taste and odor control, plant operation, safety, and laboratory procedures; principles and techniques of surveying water sources and surface storage for capacity and potential contamination, and operation of water distribution system including storage facilities, distribution system facilities, distribution system operation and maintenance, disinfections, and safety; computer logging and graphing methods related to water treatment and distribution; federal statutes regarding water quality, treatment, and reporting requirements. **Ability to:** establish work performance standards, assign and review work, provide work direction, evaluate performance, and provide counseling and discipline to subordinate staff; read and interpret statutes and regulations regarding water quality,

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Page 4 of 6

## MINIMUM QUALIFICATIONS (cont'd)

### WATER SYSTEM MANAGER (cont'd)

#### ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

distribution, water rights, easements, and right-of-way; organize work and direct staff and inmates; prepare monthly reports from field data and maintenance logs; establish and maintain effective working relationships with staff and interested parties; *and all knowledge, skills and abilities required at the lower levels.*

#### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

**Detailed knowledge of:** State statutes and regulations regarding water quality, treatment and reporting requirements. **Working knowledge of:** State rules and regulations regarding personnel management, fiscal management, and purchasing; preparation of grants and grant reporting requirements. **Ability to:** oversee the management and collection of the State's water resources distributed to Carson City and Storey counties and the treatment and distribution of water provided to the Stewart building complex; work effectively with special interest groups, interested parties, and legislative committees who are developing water policies, long range water needs assessments, water budgeting and distribution plans, and conservation and education plans and initiatives; oversee the development and maintenance of Sierra water collection; establish maintenance or replacement schedules for equipment, facilities, pipelines, and catchments; develop and oversee a dedicated budget including projecting revenues and expenditures; monitor expenditures during the fiscal year; ensure the proper payment for distributed water; assist in the development of water supply contracts.

### WATER SYSTEM OPERATOR II

**EDUCATION AND EXPERIENCE:** Graduation from high school or equivalent education and two years of experience in the operation and maintenance of a treatment or water distribution system; **OR** an equivalent combination of education and experience. *(See Special Notes and Requirements)*

#### ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**Working knowledge of:** principles and techniques of operating and maintaining a reservoir water system including reservoir management and intake structures, coagulation and flocculation, sedimentation, filtration, disinfections, corrosion control, taste and odor control, plant operation, safety, and laboratory procedures; principles and techniques of surveying water sources and surface storage for capacity and potential contamination, and operation of water distribution systems including storage facilities, distribution system facilities, distribution system operation and maintenance, disinfections, and safety; computer logging and graphing methods related to water treatment and distribution; federal and State rules and regulations regarding water quality, treatment, and reporting requirements; transportation of fuel using a tanker truck. **Ability to:** provide first-line supervision to lower level employees and inmates; *and all knowledge, skills and abilities required at the lower levels.*

#### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

*(These are identical to the Entry Level Knowledge, Skills, and Abilities required for Water System Manager.)*

### WATER SYSTEM OPERATOR I

**EDUCATION AND EXPERIENCE:** Graduation from high school or equivalent education and one year of experience which included maintaining a water collection, storage, treatment, and distribution system; **OR** an equivalent combination of education and experience. *(See Special Notes and Requirements)*

WATER SYSTEM MANAGER	34	G	9.475
WATER SYSTEM OPERATOR II	31	G	9.498
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Page 5 of 6

### MINIMUM QUALIFICATIONS (cont'd)

#### WATER SYSTEM OPERATOR I

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**General knowledge of:** principles and techniques of operating and maintaining a reservoir water system including reservoir management and intake structures, coagulation and flocculation, sedimentation, filtration, disinfections, corrosion control, taste and odor control, plant operation, safety, and laboratory procedures; principles and techniques of surveying water sources and surface storage for capacity and potential contamination; federal and State rules and regulations regarding water quality, treatment, and reporting requirements; transportation of fuel using a tanker truck. **Ability to:** operate a water treatment plant according to federal and State statutes and regulations regarding water quality and treatment; analyze water samples and calculate correct chemical dosages; inspect equipment to assess maintenance and replace needs; use tools and operate heavy equipment to maintain roads, and maintain, repair or replace pipelines, culverts, valves, pumps, meters and other devices; conduct on-site inspections and maintain inspection logs of equipment, pipelines, catchments and reservoirs; record and chart data using computer graphing software; direct the work of seasonal employees and inmates; *and all knowledge, skills and abilities required at the lower level.*

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

**Working knowledge of:** operation of water distribution systems including storage facilities, distribution system facilities, distribution system operation and maintenance, disinfections, and safety procedures. **Ability to:** oversee assigned projects and provide work direction to seasonal employees and inmates; read plans and determine materials and equipment needs to complete a project; develop reports, cost estimates and projections related to water collection, treatment and distribution.

#### WATER SYSTEM WORKER

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education which included vocational education course work and one year of semi-skilled experience maintaining equipment, operating machinery, constructing pipelines, or other related work experience; **OR** an equivalent combination of education and experience. *(See Special Notes and Requirements)*

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**Working knowledge of:** the operation and transportation of vehicles weighing 26,001 pounds or more. **General knowledge of:** algebra and geometry; the operation, repair, and maintenance of valves, meters, pipes, gages, culverts, diesel engines. **Ability to:** operate and transport vehicles weighing 26,001 pounds or more; collect field data and prepare maintenance logs; enter and retrieve data using a computer; perform heavy physical labor; use hand tools and equipment used in maintaining roads, pipelines, culverts, valves, pumps, and meters; perform mathematic computations; read and comprehend administrative policy, regulatory laws and procedures, safety and equipment publications; read and understand water flow meters and snow depth gauges; communicate effectively both orally and in writing.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

*(These are identical to the entry level knowledge, skills, and abilities required for a Water System Operator I.)*

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Page 6 of 6

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

	<u>9.475</u>	<u>9.498</u>	<u>9.478</u>	<u>9.499</u>
ESTABLISHED:	8/17/01R 7/5/02UC	6/22/70	12/26/91R	12/26/91R
REVISED:		1/24/84-3	11/3/92UC	11/3/92UC
REVISED:		3/3/89		
REVISED:		7/1/91P		
		11/29/90PC		
REVISED:		4/17/02R	4/17/02R	4/17/02R
		7/5/02UC	7/5/02UC	7/5/02UC
REVISED:	6/27/03PC	6/27/03PC	6/27/03PC	6/27/03PC